

**GOWANUS CANAL SUPERFUND SITE  
RTA2 REMEDIAL CONSTRUCTION  
Water Quality Monitoring Weekly Data Summary**

**PERIOD: December 22, 2025 – December 26, 2025**

**Date of Report: December 30, 2025**

**Report Contents**

- Scope of Monitoring
- Report of Exceedances
- Turbidity Buoy Data
- Summary of Visual Observations

*Prepared by*

B&B Engineers & Geologists ▶  
of new york, p.c.

*an affiliate of Geosyntec Consultants*

1255 Roberts Blvd, Suite 200  
Kennesaw, GA 30144  
Project Number JR0289B

## 1. SCOPE OF MONITORING

### 1.1 Buoy Locations

In accordance with the Water Quality Monitoring Plan for In-waterway Construction Activities (WQMP) issued March 27, 2024, buoys equipped with multi-parameter water quality sondes, were deployed to monitor turbidity related to RTA2 construction activities. Buoys were deployed in the Fourth Street Turning Basin (TB4) to monitor background turbidity unaffected by in-water construction activities and at the North Carroll Street Bridge, which is referred to as the ambient buoy. A sentinel buoy was deployed north of 3<sup>rd</sup> Street Bridge (3SB), along the west bulkhead. A sentinel buoy was deployed north of 9<sup>th</sup> Street Bridge (9SB), along the west bulkhead. These buoys (Figure 1) are in use to monitor the RTA2 pre-construction activities.

All readings from buoys were transmitted via telemetry at 15-minute intervals. The instrument used to collect turbidity from the buoys is an In-Situ VuLink (telemetry) and AquaTroll500 (sonde), equipped with optical sensors capable of reading turbidity levels with an accuracy of +/- 0.5 NTU.

### 1.2 Summary of Monitoring Adjustments during Construction

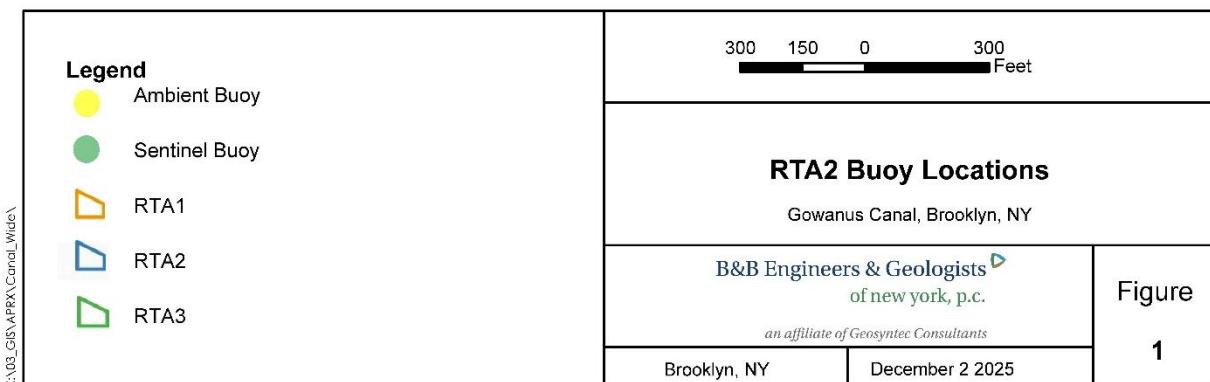
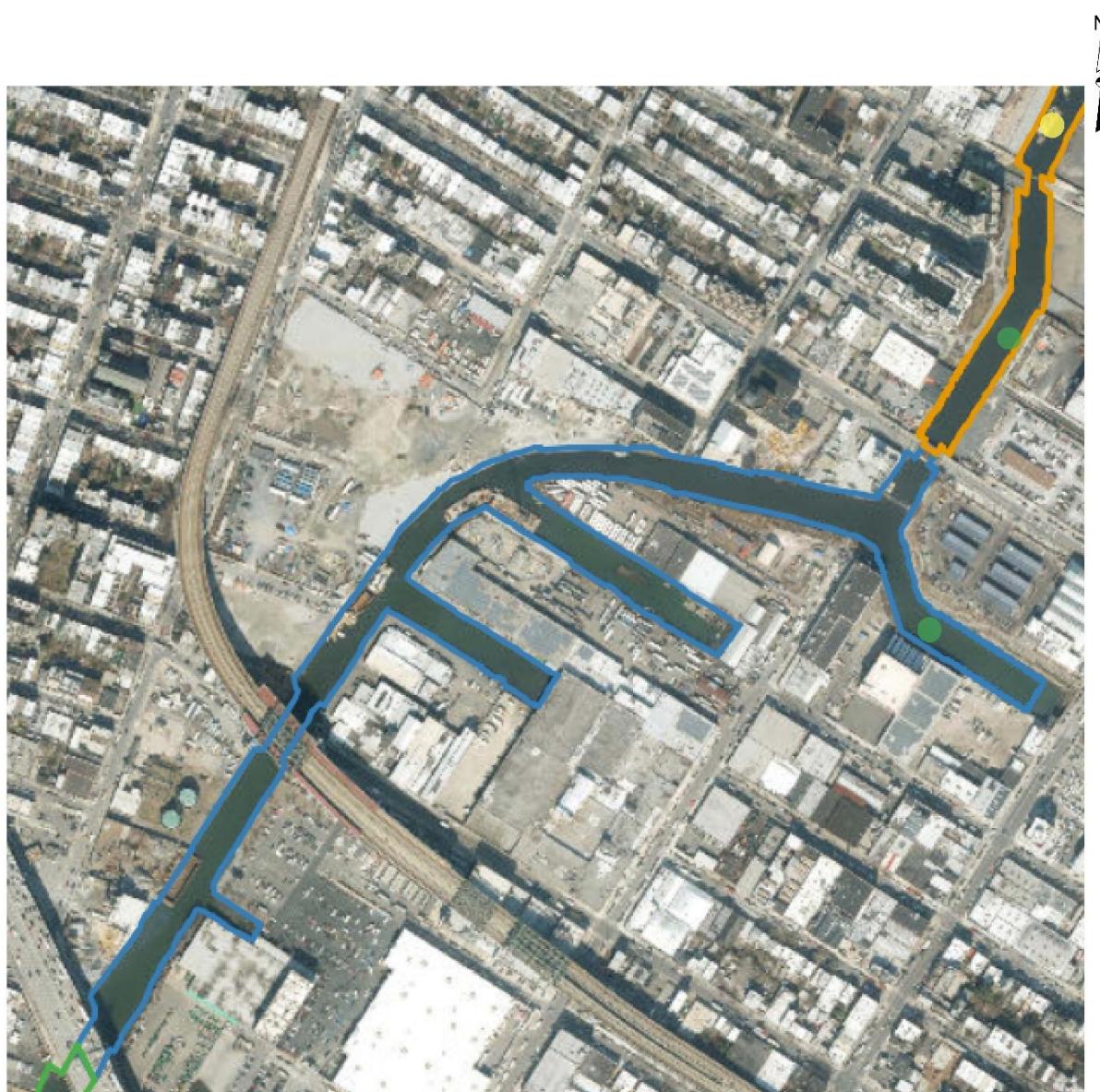
- August 9, 2024, after the conclusion of RTA1 WQMP, two additional buoys were added to the RTA2 WQMP, for a total of three sentinel buoys. The ambient buoy was moved to approximately ten meters north of Carroll Street Bridge, on the west side of the canal (ambient). A sentinel buoy was placed approximately twenty meters north of 3<sup>rd</sup> Street Bridge on the west side (3SB). A sentinel buoy was placed in Fourth Street Turning Basin (TB4). The 9<sup>th</sup> Street Bridge sentinel buoy (9SB) was not moved.
- To reduce instrument downtime, the 9th Street Bridge sentinel buoy (9SB) was relocated to the northeast side of the 9th Street Bridge on August 19, 2024. After two days of data collection, elevated turbidity readings were observed both during and outside of work hours. Consequently, on August 21, 2024, the buoy was moved again, this time to the northeast corner of Hamilton Street Bridge.
- Turbidity readings at the Hamilton Street Bridge location exceeded 100 NTU both during and outside working hours. However, these readings were not representative of the actual turbidity within the RTA2 work area. Due to commercial traffic, a safe location for the sonde and buoy could not be found south of the 9th Street Bridge. Consequently, the sonde and buoy were relocated to the west side, 5 meters north of the 9th Street Bridge on August 27, 2024, at 08:15.
- Turbidity readings at 9SB were noted to be erratic and exceed 100 NTU both during and outside working hours. The buoy was moved approximately 20 meters north of 9<sup>th</sup> Street Bridge on September 9, 2024.
- On September 16, 2024, the 9SB was deselected from construction monitoring, as there are no construction activities in the main canal or in the vicinity of 9<sup>th</sup> Street Bridge. The

buoy will remain in the water to collect background data as it is believed this area has naturally high NTU readings. A spot check zero calibration was performed on the sonde on September 18, 2024, to confirm the sensors were reading properly during this background monitoring period.

- On November 7, 2024, the ambient sonde and buoy was moved to the center of Carroll Street Bridge to reduce instrument downtime due to poor cell signal. This area was found to have a 100% cellular signal.
- On November 18, 2024, the sentinel buoy in TB4 was deselected from construction monitoring due to instrument errors. The buoy will remain out of service until maintenance and field observations can be made.
- On November 25, 2024, the 9SB sonde and buoy were placed back into the water quality monitoring program.
- On December 18, 2024, the 9SB sonde and buoy were relocated south of 9<sup>th</sup> Street Bridge along the eastern bulkhead, to avoid construction vessel traffic and shallow waters which had been resulting in false elevated readings, particularly during low tide events.
- On February 12, 2025, after observing a pause in data transmission, the ambient sonde and buoy were moved to get a better signal in the area. It was moved to approximately 150 feet north of Carroll Street Bridge, to the center of the canal. On February 14, 2025, with data transmission issues not resolving, the ambient sonde and buoy were moved to approximately 200 feet south of Union Street Bridge, in the center of the canal where stronger signal strength has been observed. A test upload was performed; however, data did not upload. Further troubleshooting will be required.
- On February 18, 2025, the ambient sonde buoy was removed from service due to consistent instrumentation and telemetry issues. The buoy will remain out of service until repairs are made.
- On February 25, 2025, the Ambient sonde and buoy was reinstated and positioned 200 feet south of Union Street Bridge. Elevated readings were recorded, prompting a calibration check to verify the turbidity sensor's functionality. The sensor was confirmed to be operating normally.
- On February 25, 2025, the 9SB sonde was taken out of service due to instrumentation and telemetry failure. No data was recorded from 13:45 onward. The sonde will remain out of service until repairs are completed.
- On February 28, 2025, the Ambient buoy was moved another 200 feet south to the middle of Carroll Street bridge, to deeper water conditions.
- On March 17, 2025, a rental sonde unit was deployed at the sentinel buoy in TB4 while repairs to the original sonde are ongoing.

- On March 25, 2025, the sonde for the 9SB was redeployed into service. It was placed Northeast of the 9<sup>th</sup> Street Bridge. Readings have remained consistent and stable since deployment.
- On March 25, 2025, the 3SB was removed from service due to instrumentation and telemetry issues. The buoy will remain out of service until a rental sonde arrives while the other is sent out for repairs and maintenance.
- On March 28, 2025, the TB4 buoy was adjusted approximately 10 feet to deeper water conditions.
- On April 3, 2025, a repaired sonde was deployed at the north of 3SB location in lieu of a rental sonde as mentioned in the monitoring adjustment on March 25, 2025.
- On April 17, 2025, a repaired sonde replaced the rental unit housed by the sentinel buoy in TB4.
- On April 21, 2025, the 9SB was moved 25 feet North to avoid being near an outfall and to prevent erroneously high readings.
- On April 24, 2025, a secondary anchor was added to the 9SB to prevent drift.
- On April 25, 2025, investigation and cleaning is ongoing at the TB4 buoy.
- On April 28, 2025, the Ambient sonde and buoy were moved 80 feet north and cleaning maintenance was performed. The readings stabilized following the movement and subsequent cleaning.
- On May 19, 2025, the 9SB sonde was removed from service due to telemetry failure. The sonde will be returned to service once a new antenna is installed onto the buoy it is housed in.
- On May 27, 2025, the 9SB sonde was re-deployed into service following completion of repairs to telemetry.
- On July 10, 2025, the TB4 sonde was relocated from the northside to the southside of the turbidity curtain in turning basin 4. It had been previously relocated to the north side of the turbidity curtain for easier access during scheduled maintenance.
- On July 29, 2025, the TB4 sonde was relocated to its previous location in turning basin 4 at the north side of the turbidity curtain. This was to allow for easier maintenance of the sonde and to prevent interaction with the turbidity curtain.
- On September 8, 2025, the 9SB sonde was taken out of service after sustaining damage to its buoy casing. The sonde will be returned to service once repairs are complete or the buoy is replaced.

- On September 10, 2025, the 3SB sonde was relocated 20 feet South of its original location North of the 3rd Street Bridge to facilitate easier maintenance and prevent interference with the turbidity curtain.
- On November 18, 2025, the 3SB sonde was relocated 10 feet South of its previous location North of the 3rd Street Bridge to prevent interference with the turbidity curtain.
- On November 26, 2025, the 3SB sonde was relocated 200 feet North from the 3rd Street Bridge to prevent further interference with the turbidity curtain.
- On December 3, 2025, the 3SB sonde and buoy were taken out of service due to a broken anchor line and antenna. The sonde will be returned to service once repairs are complete.
- On December 8, 2025, the 3SB sonde and buoy were returned to service following repairs to the antenna and anchor line.



### **1.3 Current Reporting Period Scope of Monitoring**

During the week of December 22, 2025, a maximum of three buoys equipped with multi-parameter water quality sondes were deployed as described in Section 1.2. The Ambient buoy is deployed in the center of the canal, 80 feet north of Carroll Street bridge, the third street sentinel buoy is deployed 200 feet north of the Third Street Bridge, and the TB4 sentinel buoy is deployed approximately 200 feet into the Fourth Street Turning Basin.

Due to the holiday season, construction activities were suspended for this reporting period. Therefore, no water quality data was collected.

## **2. REPORT OF EXCEEDANCES**

No construction work occurred during the monitoring period. Therefore, no turbidity data has been recorded.

**Trigger criterion** – Any of the following:

- The rolling average of the relevant sentinel buoy turbidity measurements over a one-hour period exceeds the rolling average of the ambient buoy turbidity measurements by 20 NTU excluding any eliminated outlier measurements and in-waterway construction activities cannot be immediately excluded as the source following consultation with EPA; or
- Either an oil sheen or a turbidity plume is visually observed at the relevant sentinel buoy and in-waterway construction activities are readily identified as the source.
- **Action criterion** – Any of the following:
  - The rolling average of the turbidity measurements of the sentinel buoy outside of RTA2 over a one-hour period exceeds the rolling average of the ambient buoy turbidity measurements by 40 NTU excluding any eliminated outlier measurements and in-waterway construction activities cannot be immediately excluded as the source following consultation with EPA; or
  - Either an oil sheen or a turbidity plume is visually observed outside of RTA2, and any deployed engineering controls and in-waterway construction activities are readily identified as the source.

An outlier is defined as a reading that is outside the range of 50 to 200 percent of the average of the three previous readings. In addition, to be considered an outlier, the subsequent reading must return to a range of 75 to 133 percent of the average of the three readings preceding the outlier.

## **2.1 Response to Criteria Exceedances**

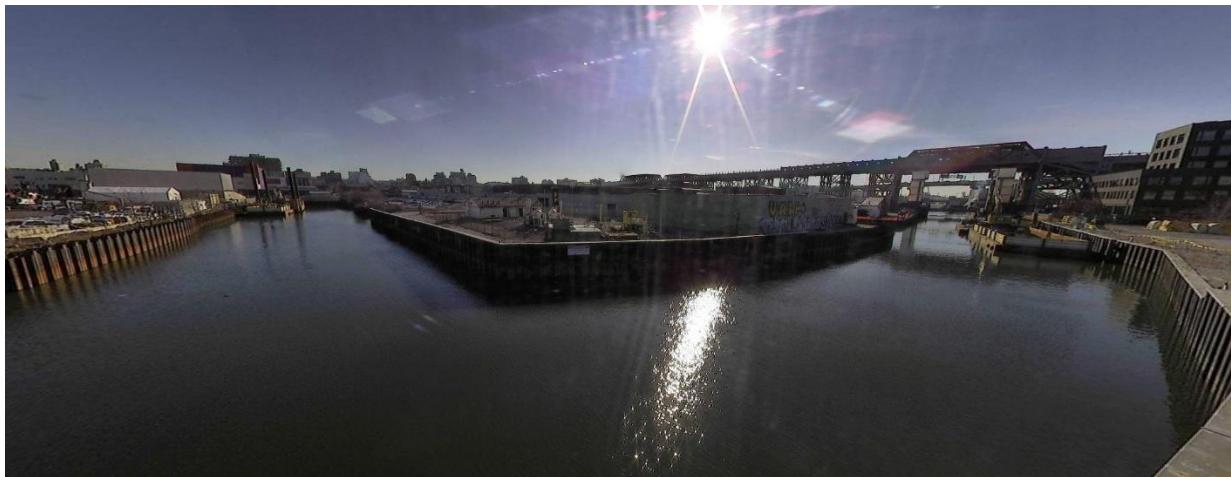
The trigger level criterion serves to provide early notification to the contractor of construction activities that may lead to an exceedance of the action level criterion. In the event of an exceedance to the trigger criterion, the contractor will not be stopped, and the contractor will be directed to investigate the source of the exceedance and evaluate Best Management Practices (BMPs). In the event of an exceedance to the action level criterion, in-waterway construction activities may be slowed or temporarily suspended as necessary while the contractor investigates the source of the exceedance and appropriate mitigation, and corrective measures are determined. A more detailed description of responses to exceedances of the trigger and action level criteria is provided in Section 4.2 of the WQMP.

## **3. TURBIDITY BUOY DATA**

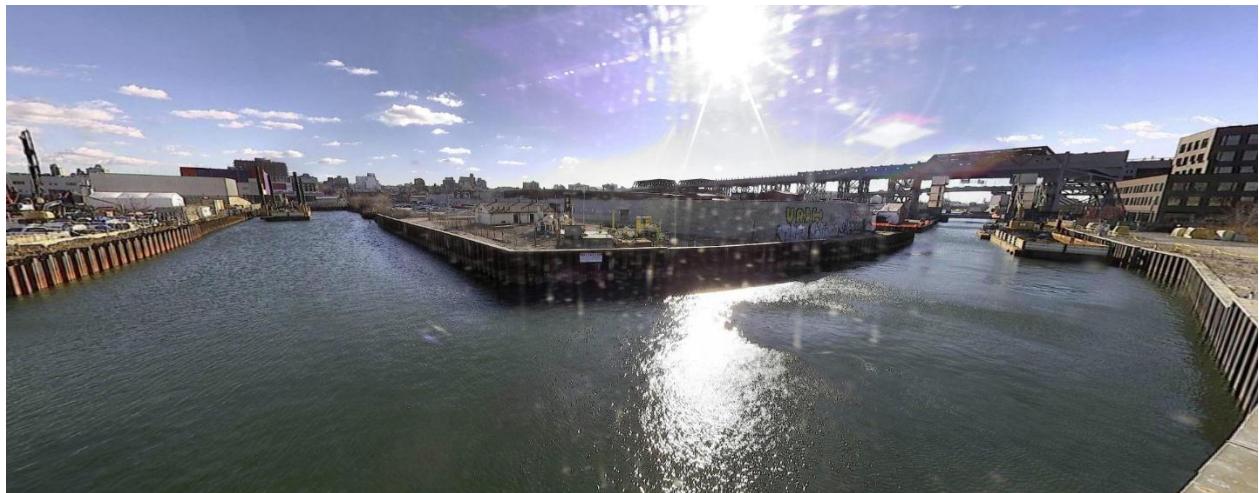
No construction work occurred during the monitoring period. Therefore, no turbidity data has been recorded.

## **4. SUMMARY OF VISUAL OBSERVATIONS**

Throughout most of the reporting period, sheens in the RTA2 areas ranged from minimal to moderate.



**Figure 8 – December 22, 2025.** Midday conditions near Turning Basin 6 and the main canal.



**Figure 9 – December 24, 2025.** Midday conditions near Turning Basin 6 and the main canal.